

MODIS Technical Team Meeting
Thursday, October 3, 2002
Building 33, Room E125

Vince Salomonson chaired the meeting. In attendance were Barbara Conboy, Ed Masuoka, Jack Xiong, Skip Reber, Shaida Johnston, Steve Kempler, Eric Vermote, Wayne Esaias, Robert Wolfe, and Bill Barnes, with Yolanda Harvey taking the minutes.

1.0 Upcoming Events

- 34th COSPAR Scientific Assembly, October 10-19, 2002, Houston, TX (abstract deadline past)
- MODIS Outreach Workshop on Land Surface Radiation and Snow and Ice Products, October 21-22, 2002, Boston, MA
- Pecora 15 & Land Satellite Information IV Symposium, November 12-15, 2002, Denver, CO (abstract deadline past)
- EOS Investigator Working Group Meeting, November 18-20, Ellicott City, MD

2.0 Meeting Minutes

2.1 General Discussion

Salomonson announced that there is an effort to develop a Group Award for the Aqua mission. He said that he submitted the names of the Science Team members and is seeking advice for other names that should be added. The names have to be submitted by early next week (i.e., October 7th).

Salomonson asked for feedback on who has committed to present at the IWG. Esaias reported that Mark Abbott, Ken Carder, and himself will present for the Oceans discipline. There is a slight conflict between the timing of the IWG and the Oceans Optics Meeting (they are scheduled during the same week), but they've arranged to speak at the IWG in the afternoon so that MODIS will be represented at both. Salomonson indicated that Dorothy Hall has been invited to make a presentation.

Salomonson said that he needs to update the listing of "validated" products on the MODIS home page and on Skip Reber's data products page. Wayne Esaias provided a list of validated Oceans products. Salomonson reported that he understands that Jeff Morisette has the latest list of validated land products, so he will be trying to check with him

Reber reported that a week ago he had a meeting with Mike Moore, Ramapriyan of ESDIS, Ken McDonald, and Vanessa Griffin concerning requirements growth and what can be done about it. Data volume, archiving, and distribution were discussed at the meeting, with the main focus on archiving. There are budget constraints, and continued growth (especially by MODIS) will outstrip the operating budget. New hardware has been, and is, being made available, but expanded operations have not been funded. Reber wanted the group to be aware that this discussion is ongoing.

Justice asked Reber if there has been an update on the maintenance contract, and Reber said that he is not aware of one. (Added post meeting: the proposals were all due by October 7)

Salomonson said that MODIS will be well- represented at an upcoming George Mason Workshop.

Johnston reported that the PCR process is too long and need to be fixed. She is working on streamlining the process.

Conboy reported that she is still getting input for the data product handbook. Janet Campbell is assembling the changes for the Oceans Team. Conboy said that she is also waiting on Hall and Wolfe (geolocation).

Salomonson reported that there is a graduate student from the University of Washington who is trying to get MODIS code for something he is working on. Salomonson said that he advised the student that he should get the code from Pat Coronado's site. Justice suggested making clear to the student that the code placed in the "institutional" part of the Coronado web site is pretty much as it exists when used in MODAPS. It will therefore require quite a bit of effort to apply on other sites. There just simply aren't enough resources available to make it into a "turnkey" capability. Salomonson said that Coronado's site provides that background rather clearly.

2.2 Instrument Status

2.2.1 Aqua MODIS

Barnes showed a slide on validation data from Kurt Thome's Railroad Valley efforts. He pointed out four days in which the ratio of L1B on Aqua to ground measurements data is within a few percent of unity, and that Thome is unhappy with two days of the data. The remaining two days are generally within 1-2% of the ground data. Salomonson suggested coordinating Aqua and Terra overpasses, and Barnes said that they plan on doing that. Salomonson said that there is also a comparison with MISR happening, and in general there is a lot of validation activity going on.

Barnes and Xiong talked about the possibility of normalizing the subsample response of the 250- and 500-meter bands, and that they are not planning to do it right now. This is in the context of an inquiry from Terry Haran/NSIDC about non-uniformity of 250-meter Level 1B data. Xiong said that he had looked at Band 1 of the image mentioned by Haran, and the percent difference in the response of the detectors. There is a slight offset between subframes that doesn't scale with radiance. Vermote suggested looking at Aqua, because it is better, and Xiong said that yes, they should. He said that he will send the data to Vermote and Salomonson.

2.2.2 Terra MODIS

Barnes reported that the Terra MODIS diffuser has degraded by 7-8%, but has been measured at only one azimuthal angle. He said that they want like to redo the yaw maneuvers. This will result in a small lose of data over the poles, but it will help the reflected solar bands calibration. Each maneuver will take about 20 minutes. Esaias said that he thinks it is a good idea.

2.3 DAAC

Kempler reported that the “GBAD” problems (dropouts) are still being worked on. He said that Alcott is working on how to bypass the EMOS between EDOS and us. Kempler said it’s been a long ongoing problem, and they want to figure out the right solution.

As for distribution, the data pool is up, populated, and announced as of October 2nd. They will begin Collection 4 forward processing toward the end of October, and PGS2 has completed testing. PGS3 has been promoted to ops. Kempler said that Jim Simpson is being sent a tape of data as a test to be sure he can read the data. Then the GES DAAC will start the ~2 month process of sending Jim 15 TB of MOIDS data. In addition, Andy Dessler’s data reduction algorithm is in and will be run in the DAACs data-mining environment during the next MODIS data reprocessing, as the data goes into the data pool. Salomonson reported that he talked to someone at SSAI who wants to compare MODIS data to TOMS, but ended up getting too much data. Barnes asked Kempler if the DAAC encourages people to send them their algorithms to pull out the data they need, and Kempler said yes, they’ve been promoting that for a long time. Reber asked what is the criteria for providing software, and Kempler responded by saying that at this time we will take any algorithm that is operational at their home sight, but obviously, if we get inundated with software, we will have to hold back on integrations of newer requests. Wolfe asked about resources for this, and Kempler said that they’re using V0 resources and not taking resources away from Level 1 processing. Barnes wondered how many people know that the DAAC does this, and Kempler said that it’s been advertised on the website and MODIS Science Team Meetings, but people just have not taken to it.

2.4 MODAPS

Masuoka gave out a schedule of products, and reported that they are still on track for starting Land processing October 29th. Atmospheres will also start at the end of Oct, in total a 2-week slip. In addition, PGEO6 needs a LUT from Mark Gray. Salomonson suggested sending a note to King about it. Masuoka said that he King is aware of the change but he would look into it.

Masuoka reported a lot of SIN grid changes still need to come in from the Land science team, and there are still quite a few things left to do. The CMGs will go last, and if they are not ready, they will reprocess without them. He said that it is not likely that they can accommodate anything other than what is already on the schedule. He asked if Huete’s products, VI monthly and VI monthly CMG can be dropped from the Collection 4 reprocessing. Wolfe will check with Justice and Huete about this

Salomonson asked whether they will be able to continue at the end of November, and Masuoka said that they need to agree on a start date for Land. Justice said that they want to start with March 2000 data and work though because of issues associated with SAFARI.

Masuoka asked whether he should send the current Oceans software to Coronado for distribution to the community, and Esaias said “yes.”

Masuoka said that he is reviewing an ESDIS CCR (Configuration Change Request) to add capacity to ingest and archive MODIS products at the DAACs. He noted that there were minor

errors in the spreadsheet but nothing that had an effect on the bottom line in terms of equipment being purchased to increase archive rates and add capability to archive more MODIS products.

2.5 Land

Salomonson asked Justice for clarification on the Tree Cover maps from Prof. Townshend. Justice said he will check on it and get some insight provided.

Vermote reported that he is making progress on the snow product that needed to be fixed on the MODIS CD. He will meet with Hall next week. Salomonson said that the CD enhancement that Vermote showed last week was good and perhaps should be looked at to see if it would be useful for the new Oceans CD. He added that there is already a snow CD that is being developed by Dorothy Hall. It is being reviewed by NSIDC. Esaias said that he was impressed by what he had seen in what Eric Vermote had done, and he asked Vermote if he would provide a front end for other CDs. Vermote said that they can copy and modify the interface on the current CD so long as they give appropriate credit. He said that he is also available for guidance.

3.0 Action Items

3.1 New Action Items

None.

3.2 Old Action Items

3.2.1 Technical team to discuss further the issue of predicted ephemeris data and how to improve it.

Status: Open.

Ed Masuoka and Robert Wolfe plan to meet with the Terra Flight Operations Team to see if they can run definitive ephemeris 2-4 times per day. The context for this issue is to provide better geolocation information for things like fire front tracking and similar issues.

3.2.2 Science Team to update the Terra Data Products Handbook and submit edits and new gray scale imagery to Barbara Conboy within a few weeks.

Status: Open.

Some members of the Oceans, Land, and Atmospheres are still reviewing; Abbott, Barnes, Gordon, Huete, King, Menzel (for Mod 35), Strahler, Vermote, Gao, Townshend, Carder, Kaufman, Wan, Justice, Myneni, and Running have completed their revisions.

3.2.3 Justice to get back to the Technical Team about whether or not the land-water mask will be changed.

Status: Closed.

Need to decide whether want to hold up schedule or not to get mask in. Justice sent out emails, waiting for answers.

3.2.4 Johnston to take a lead on developing a plan/process for the DAAC getting backup data from SDST.

Status: Open.